THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LVI. THURSDAY, FEBRUARY 12, 1857. No. 2.

CASE OF SPINA BIFIDA, WITH MALFORMATION OF THE GENITALS.

BY S. KNEELAND, JR., M.D., BOSTON.

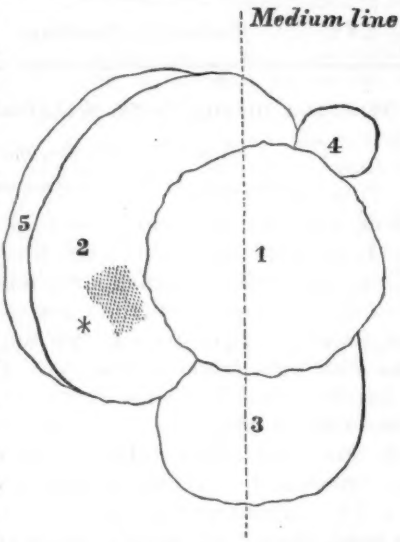
[Communicated for the Boston Medical and Surgical Journal.]

THE child was two days old when first seen by me in consultation. Both parents were healthy, though the mother had suffered somewhat from leucorrhœa during pregnancy. First child. Nothing remarkable occurred, during her pregnancy, which led her to fear that anything would be wrong with the child. In the early period she was somewhat frightened by a crazy man, but only for a short time; in the seventh month she saw a large black bear, which had been shot in the neighborhood, and in which the spinal column had been split open in the dorsal region by an axe. These are mentioned not as probable causes of the arrest of development, but as curious coincidences.

The head, chest and upper extremities were remarkably plump and well developed; the head was covered with an extraordinary quantity of black hair, in connection with which it may be mentioned that both parents had black hair. Nothing abnormal could be detected in the cranium, except that the fontanelles were remarkably open, and the parietal suture was open about two thirds of an inch in width for its whole extent; the head was of average size for a child at term. The labor was easy, and of about six hours' duration; the head presented; the umbilical region normal.

At birth there was, over the last lumbar vertebræ, a tumor of a circular form, about one and one fourth inch in diameter, and an inch in prominence, flattened at the top, with a small pedicle entering an opening in the vertebral column, the bony edges of which could be felt. This tumor was covered with ordinary skin, not discolored, but having considerable hair on it, especially around its exit from the canal; it was of a cartilaginous feel, slightly compressible, and quite hard, almost bony, under the middle of its upper surface. Pressure on this made the child shrink and cry. Besides this tumor, there were around it four others,

of different sizes (marked 2, 3, 4, 5); these did not seem to communicate with each other. At birth these presented a wrinkled, flaccid appearance, and contained little, if any, fluid. They began to fill, however, soon after, and at the end of six hours were completely distended. Their walls consisted of an exceedingly delicate membrane, so thin that they could not be handled with sufficient freedom to examine them satisfactorily. They presented a livid appearance, and had vessels ramifying in their tissue. The largest one, on the left of the spine, appeared ulcerated, and a thin serous fluid constantly oozed out at the spot marked (*). There did not seem to be any "suintement" from the other tumors. On raising them gently with a probe, the membranes could be traced into the spinal opening. The tumors appeared to be rather sensitive, as the child cried when they were touched, and it could not bear to be laid on its back. Below the tumors, the spinal column was closed for about half an inch; below this, in the region of the lower part of the sacrum and coccyx, no bone could be felt. Gentle pressure did not affect the discharge, and did not cause any perceptible fulness at the fontanelles. The soft tumors were in part overlied by the large one, marked "1"; the soft tumor "5" was almost entirely covered by the tumor "2."



There was also malformation of the genital organs. Below the pubic region there was a protuberance, about one third of an inch in prominence, and the same in diameter, looking more like an inversion of the mucous surface of the bladder than a penis—from this the urine constantly dribbled. There did not seem to be any bone where the pubis ought to be, and the finger could be pressed down quite deeply above the "penoid" protuberance into a yielding mass of viscera, which, from the gurgling of air and fluid, were evidently folds of intestine; whether these descended into the structure next described, forming a hernia, could not be clearly made out. On each side of the penis was a scrotum, extending round under the perinæum to within half an inch of the anus; I call this a scrotum (though I could detect no testis

in it) from the perfect resemblance of its wrinkled skin to that organ. This scrotum was about an inch wide and high in its middle portion, whence it faded out gradually towards the penis and anus; it looked very much like the old-fashioned epaulette of the common soldier. Between these scrotums, or "scrota," was a fissure extending for their whole length, which could be opened for about half an inch in its deepest part; it presented the ordinary appearance of the genital mucous membrane. No opening could be seen in it; from the struggles of the child, I did not examine at that time with the probe.

This malformation of the genitals is interesting, in connection with three cases of spina bifida reported in the October number of the *American Journal of Medical Sciences* by Dr. Byford; his cases were complicated with prolapse of the uterus, while this child was evidently a male. It is much to be regretted that it was impossible to obtain a *post-mortem* examination in the present case. There was quite a growth of hair on the back between the shoulders, and the legs just above the ankles were very black with a long silky hair, gradually lessening towards the knees. The right foot was abnormally flexible on the leg, either from laxity of the ligaments or imperfect development of the bones; the dorsum of the foot could be put with perfect ease in contact with the anterior aspect of the leg. There was nothing of this in the left foot, and the lower extremities were normally developed in other respects.

Up to this time the child had seemed as well and strong as children generally. It swallowed well; its movements were strong; the rectum and bladder were duly evacuated; and there was no paralysis of the lower extremities. The cries were loud and prolonged, and moving it evidently gave it pain. At the end of the second day it was suddenly seized with general convulsions, in which the extremities and the face were affected; the eyes turned up, frothing at the mouth, and incessant crying; these lasted about three hours, and subsided of their own accord. The breathing from the birth had been at times of a sobbing, convulsive character. The chest was remarkably round and large. As yet there was no sign of coma or cerebral disorganization.

The child was fed on cracker soaked in water, as the mother had no milk; and, if she had, the child would not have been presented to her. A few drops of paregoric were the only medicine given, which kept the child still; cloths smeared with sweet oil were placed over the tumors to protect them from the friction of the dress.

During the third day the convulsions occurred at intervals, their intensity gradually lessening with the powers of life. Death took place in the evening of the third day. Coma gradually supervened, and the child had the appearance and actions of cerebral

rather than of spinal disease. A short time before death, the cranial sutures, including the frontal and occipital, were open to such an extent that the vault of the cranium had not sufficient firmness to sustain its own weight, but gravitated in a perfectly flaccid manner to one side or the other, as if its walls were membranous. There was evident hydrocephaloid effusion, which was doubtless the immediate cause of death. The large tumor marked "2" burst before death, and gangrene had begun to affect all the soft tumors, as indicated both by the fœtor and the color of their tissue.

A CASE OF PSEUDO-MEMBRANOUS CROUP.

BY THOMAS F. BARTON, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

I REPORT the following case of pseudo-membranous croup, as possessing peculiar interest only in the unusual length and completeness of the tubular membrane expectorated.

I lately saw a little girl, six years of age, on the sixth day of her illness, laboring under the disease here alluded to. She had had no previous medical attendance. I was told that, upon the day before, she was sicker than usual, till, during a fit of coughing, accompanied with spontaneous vomiting, she expectorated a stringy substance, strongly exciting the attention of the attendants, after which, it was thought, she was getting well, but that the disease was now returning with more than its usual severity.

Upon examination, I found that the child had expectorated a false membrane, which by measurement was four inches in length above its point of bifurcation. Below this point, one branch was one inch, and the other two in length. The longer branch was also subdivided near its lower extremity into two smaller branches. The main trunk of the membrane and its branches was entirely whole, and perfectly tubular up to about an inch above the bifurcation mentioned. There was then a longitudinal fissure, with ragged and irregular edges, for about an inch and a half, while the remainder of the laryngeal end of the tube was perfect. The side of the tube containing this fissure was much its thinnest portion. Here, then, had been detached and expectorated, a continuous membrane six inches in length, having its integrity but slightly broken in one place.

The child died on the eighth day from its attack. No autopsy was held. I could not learn that any symptoms of bronchitis preceded those peculiar to croup, and hence inferred that the disease began in the laryngo-tracheal mucous membrane.

It would be interesting in a case like this, to inquire, from an examination made after death, whether the fatal termination took

place from an extension of the fibrinous exudation deeply into the bronchi, producing suffocation, or from its general renewal in its former site. We do not know whether the conjoint effect of two causes, in many instances, could have come from either operating separately. In this case, I concluded that a fresh fibrinous exudation must have occurred (in the larynx at least), from the sound of the voice and cough, and from the increasing stridulous respiration, all of which were represented to me as having assumed the same character which they had had previous to the discharge of the false membrane. There were no patches, however, of fibrinous deposit visible about the fauces.

So insidious was the attack in this case, that the disease was scarcely suspected by the parents till the sixth day; while a case of catarrhal croup, a disease so comparatively harmless, yet so often alarming in its initial symptoms, would have thrown a whole neighborhood into a speedy tumult and demanded the unremitting attention of the physician.

Jefferson, Me., February 2d, 1857.

ETHERIZATION IN CONVULSIONS.

[Communicated for the Boston Medical and Surgical Journal.]

Messrs. Editors,—Your valuable Journal has been a welcome visitor to my office for more than a thousand weeks, and I have perused its pages with interest and advantage. My few contributions to your pages remind me that I should not withhold anything in my experience, of practical importance, from our noble profession.

I think etherization, in cases of convulsions in children and adults, is not fully known and appreciated. To every case of teething convulsions, in my practice for the last three years, I have administered the pure sulphuric ether, and immediate restoration has followed with the most pleasing effect.

A severe case of puerperal convulsions occurred in my practice last month. A lady who had, at three previous pregnancies, miscarried at periods varying from four to seven months, was taken with the usual symptoms of abortion, and sent for me in haste. Perfect quiet and an anodyne were prescribed; the alarming indications soon passed off, and I left. About three o'clock the next A. M. I was sent for, and on arrival found the patient recovering from a convulsive fit. Bleeding, a cathartic, cold to the head, sinapisms to neck, legs, &c., did not prevent the recurrence of three more convulsions in less than ten hours, when I commenced the administration of sulphuric ether, and although no more convulsions occurred, it was not until near the end of forty-eight hours that the nerves became so calm as to allow the ether

to be omitted altogether. Ten days from the first attack the lady was delivered of a seven months' child, which had evidently been dead from the time of the first convulsion.

I have had a severe case of convulsions of a married lady, this week, and etherization shortly restored the patient to a healthy condition.

I consider ether really the only safe and efficient remedy for convulsions of *teething children*, or adults, now known to the profession. Probably the half is not yet learned that etherization can accomplish for suffering humanity. N. J. KNIGHT, M.D.

Somerville, January 30th, 1857.

THE RATIONALE OF THE FATAL TENDENCY OF THE WARM BATH IN ASPHYXIA.

BY MARSHALL HALL, M.D., F.R.S., ETC.

THERE is a physiological relation between the circulation and the respiration, any deviation from which, in either direction, is of a fatal tendency.

During the systemic (not the pulmonic) circulation, carbonic acid is formed; in respiration, the oxygen necessary for the formation of this carbonic acid is supplied, and the carbonic acid so formed is evolved from the system.

The immediate baneful effects of the suspension of respiration arise from the privation of oxygen, and from the retention of the carbonic acid previously formed, which becomes a blood-poison.

An animal placed in perfectly *pure nitrogen* or *hydrogen* gas dies in violent convulsions instantly. And this is doubtless owing to the privation of oxygen, for carbonic acid might be exhaled into nitrogen or hydrogen gas.

But an animal dies also in air consisting of such a proportion of *carbonic acid with oxygen* as to prevent the evolution of carbonic acid from the blood, although the quantity of oxygen might be so great that a taper blown out, and burning only as a *spark*, would be instantly kindled into *flame*.

If, without producing effects so sudden as those described, we change the relative proportion of the respiration and the circulation, morbid phenomena are produced special to each case. If the circulation be disproportionately augmented, carbonic acid is formed, and being morbidly retained, slighter convulsion and slower death ensue. If the respiration is unduly and disproportionately augmented, the animal is *cooled;* for mere *pulmonary* respiration is a cooling process, by the difference of temperature of this *in*spired and *ex*pired air; and in this case, also, the animal dies, but now from loss of temperature.

This latter is the case with the asphyxiated patient, if the respiratory movements be unduly hastened—that is, disproportionately to the rapidity of the remaining circulation.

On the other hand, if in the asphyxiated we excite the circulation without simultaneously and proportionately inducing the respiratory movements, we destroy our patient by carbonic acid, formed in the course of that circulation, and uneliminated by respiration.

This statement leads me to the proper subject of this paper—the Rationale of the Injurious and Fatal Tendency of the Warm Bath in Asphyxia: for it *is* injurious, and has, I am profoundly convinced, of itself proved fatal in cases in which the patient, without it, would have *spontaneously* recovered.

In such a case, it is surely not less essential to the progress of science and our art to remove error than to establish truth.

Warmth is so obviously a stimulus, and a stimulus is so apparently required for a patient taken out of the cold water in a state of asphyxia, that in recommending the warm bath we seem to be addressing ourselves to the common sense of mankind, and it was a step in advance to entertain a *doubt* on the subject.

But when we begin to experiment—when we learn that an animal deprived of respiration by being submerged under water, *lives longer* in *cool* water than in *warm* water, we learn to consider whether, in fact, coolness is not more favorable to life in the asphyxiated from submersion, than warmth. We recall to mind, too, that animals bear the abstraction of respiration in proportion to their coolness: the hybernant animals and the batrachian tribes will scarcely drown at all. If a kitten be first cooled, or if it be immersed in cool water, it will not drown so soon as it would do if submerged at its ordinary temperature in water of the same temperature—facts established by Edwards, by M. Brown-Séquard, and myself, and witnessed by the secretary of the Royal Humane Society, and by its superintendent, in Hyde-park.

Thus experiment is made to correct preconceived ideas, however apparently consonant with common sense.

There are other facts which point to other modes of treatment of the drowned, which the administration of the warm bath necessarily excludes. If a poor creature be perishing for want of food, we cautiously administer food. If a man be, in like manner, perishing for want of air, should we not administer air? Is this not simple and reasonable? And in the case of drowning, is not the want of air the first condition to which we should bring succor, and the want of temperature the second or third? And should we not first administer to the first want? Then in the case of drowning, we should administer air first and warmth in the second place. But may not the warmth administered without

air do great and absolute injury? It raises the temperature, and in so doing augments the necessity of respiration to life.

In the *first* place, if *any* effect be produced by the warm bath, the circulation is accelerated. But to accelerate the circulation without inducing, at the same time, efficient respiration, is to augment the formation of carbonic acid—the *blood-poison*—without its elimination from the system, and it induces, consequently, a fatal result;

Secondly, all *excited* respiration through the medium of the cutaneous excitor nerves is excluded, the uniform temperature of the warm bath excluding the excitants of those nerves arising from the *alternate* application of *heat* and *cold* to the surface;

And *thirdly*, *imitated* respiration is excluded by the very sustained position of the patient, excluding, as it does, alternate pronation and rotation, and pressure applied and removed, or changes of position and compression, which induce respiratory movements.

So that the warm bath is not only positively injurious by *poisoning*, but negatively, by excluding the de-poisoning process.

Lastly, the warm bath excludes those frictions of the limbs upwards, with pressure, which really constitute the most effectual means of promoting the circulation and warmth.

Nor is it unimportant to save the *time* expended in preparing the warm bath, or in carrying the patient to it.

And it is scarcely a minor point to direct *all our thoughts and energies*, undiverted, to *the* important remedies exclusively.

In conclusion, the warm bath is of *doubly fatal tendency:* it is so in itself positively; and it is so negatively, by excluding every real remedy.

All have heard of the *Grotto del Cane.* The poor dog is put into the carbonic acid, and taken out asphyxiated. It is plunged—not into a *warm bath*—but into the water of the adjoining *lago* Aguano, and taken out—restored!—*London Lancet.*

BOSTON SOCIETY OF NATURAL HISTORY.

[From the Transactions of the Society at a meeting held January 7th, 1857. Reported by B. S. Shaw, M.D., Secretary.]

Dr. Brown-Sequard, of Paris, who was present by invitation, addressed the Society. He stated that experiments, recently made, had proved that when air is forcibly drawn into the chest, there is a diminution in the frequency of the heart's action, sometimes to such an extent, that the pulsations amount to only two thirds the normal number. The explanation which has been given of this phenomenon is based upon mechanical grounds, but M. Séquard thinks, if this explanation be correct, it is so only to a certain extent. One other cause at least, that of a nervous influence, he has demonstrated to exist; and this is the action of the *par vagum* nerve. He finds that when

this nerve is irritated at its root, or galvanized, the action of the heart is arrested and not incited to increased frequency, as is generally the case when a nerve leading to a muscular organ is stimulated. When the chest of an animal is opened during life, without injury to this nerve, there is seen to be a control over the action of the heart, but if the nerve be cut across the control is lost. There is good ground for belief, therefore, that at every effort of inspiration there is a transmission of nervous influence along the par vagum nerve to the heart, acting as a check upon it and regulating its action, and thus preventing the increase of pulsation, which might otherwise go on in increased ratio to infinity under the excitement of forced respiration. It has been said that people have killed themselves by stopping the heart's action. One of the brothers Weber, of Leipzig, found that when an effort was made to contract the chest during a full inspiration, there was great suffering, fainting and almost death. Weber himself nearly lost his life trying the experiment. By irritating the various organs which receive branches from the par vagum, as the stomach, spleen, &c., it is found that the heart's action is diminished in frequency, and in some instances entirely suspended. Cases of sudden death from an external blow upon the stomach may be attributed to the same cause.

Dr. Séquard also referred to his researches upon the *Supra-renal Capsules*. These two small organs, lying in immediate connection with the kidneys, have been considered very unimportant until within a few years. Now it is found that when they are removed from the body of a living animal, there occurs a very great change in the blood and the animal dies in a short time. There is found to be an accumulation of pigment in the blood, and a peculiar form of crystals, not having the chemical reactions of hæmatoidine.

In answer to an inquiry, if the real use of these capsules was known, M. Séquard replied that his hypothesis was *that the function of the supra-renal capsules was to prevent the formation of pigment in the blood*, and he thinks he has isolated a substance from the blood which would be changed into pigment without the agency of these organs. This substance, perhaps, may be produced in such a quantity that the capsules cannot destroy it, even when they are in a healthy state. In the disease described a short time since by Dr. Addison, of London, and known as *bronzed-skin disease*, the coloring matter of the skin, examined under the microscope, proves to be the same as that of the negro's skin. And, as in the blood, in the same disease, there are found pigment cells, pigment granules contained in a peculiar substance, and certain crystals referred to above, he thought there was some ground for the inference that these organs are *pigment-destroying agents*. He had seen the crystalline plates sufficiently large to become impacted in the smaller vessels and to prevent the circulation of the blood, and consequently he believed if they were not the primary cause of many disturbances of the nervous influence, they were at least a partial cause.

The President (Jeffries Wyman, M.D.) exhibited a fœtal porpoise, presented by Capt. Atwood, and called attention to the embryonic condition of the jaw, which was at right angles with the vertebral column; and to the peculiar form of the tail.

The President made some observations upon certain points in the

anatomy of the blind fish of the Mammoth Cave. In examining the structure of the ridges about the head, he had found each ridge to consist of a series of papillæ, lying close together, and beneath them a branch of the fifth pair of nerves, sending off smaller branches, and forming a very sensitive plexus for each papilla. The larger fish also present the same ridges and minute structure along the body between the head and tail.

He had also found, in the same specimens, rudimentary eyes, as formerly described by him, and he had dissected out also several muscles, or bundles of muscular fibres, on each side of the eye. The stomach of each of the specimens contained a fish with large eyes, in a partially digested state. As far as he knows, this is the first instance of fish with eyes being found in the Cave.

Capt. Atwood observed that it was very common for many fish to eat their own species. Small mackerel are always found in the stomachs of large mackerel when they are abundant.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY F. E. OLIVER, M.D., SECRETARY.

JAN. 12th.—*Vesical Calculus in a Woman, extracted by the Urethra; Death; Autopsy.* Dr. CABOT reported the case.

The patient was 33 years of age, and had had a thick grayish sediment in the urine for the past five years. Stone was detected by sounding, more than a year ago; it was large at that time. The principal symptoms had been, frequent uncontrollable desire to micturate, pain before and after micturition, and sudden stoppage of the urine. This last symptom had become so constant as to require the daily use of the catheter. Urine offensive.

Jan. 1st.—The patient having with much pain introduced a catheter, a large stone was readily felt, although, from the extreme pain caused, no attempt at a thorough examination was made.

2d.—The woman having been fully etherized, was placed on her back in the usual position: the urethra was found to be large and easily dilatable, so that the little finger, well lubricated, passed readily and without force into the bladder, where a large and rough stone could be felt quite near, or upon, the neck of the organ. With slight effort and rotatory movements, the fore-finger was then passed; then the middle finger, then a narrow pair of lithotomy forceps, with which the stone was seized; but being found too large to pass the urethra, ineffectual efforts at breaking were made with various instruments. It was found to be too large to control by the fingers in the vagina, and accordingly it was again seized with the lithotomy forceps, drawn up near the urethra, and a pair of tooth forceps, having long narrow jaws, were passed up between the blades of the lithotomy forceps, the points pressed against the stone, and pieces broken off from it by a sort of gnawing process. During this part of the operation, the handles of the lithotomy forceps were held in the left hand and carried to the right of the median line, and somewhat depressed, in order to

give greater facility for the introduction and use of the tooth forceps. After spending about half an hour in these efforts, feeling that it would be very important to remove every portion of the stone from the irritated bladder, and, moreover, that the operation must not be prolonged farther, for fear that the mere prolongation would be a great source of danger, Dr. C. decided that what was left of the stone must be extracted by cutting if necessary. Having released the stone, he succeeded in getting hold of it by its smallest diameter, and, upon making a moderate effort, the stone was extracted by the urethra, without the employment of the knife. The vaginal portion of the passage having yielded largely, the extraction was made nearly upward, that is, at right angles to the trunk.

Dr. BACON stated the weight of the calculus to be 280 grains, including the fragments preserved; that its structure is cellular and not crystalline, and there are no concentric layers, so far as the interior is exposed; that it is chiefly composed of triple phosphate, mixed with phosphate of lime, a little carbonate of lime, and considerable urate of ammonia.

Dr. Cabot thought that the original stone, judging from its present shape, must have weighed, before its size was reduced, over 300 grains.

The whole time occupied in the operation was fifty minutes; during and after which a careful examination of the urethra and neck of the bladder was made with the finger, without detecting any laceration. The bladder was thoroughly washed out with tepid water, and a full opiate directed as soon as the patient should recover from the sickness caused by the ether.

During the afternoon, the patient had much nausea and vomiting, rejecting opiates, brandy, &c., but this was relieved by a mustard plaster to the epigastrium, and she slept three hours during the night.

3d.—She spoke of tenderness in the lower part of the abdomen; leeches were applied with some apparent relief. At 9, P. M., she began to complain of general tenderness in the abdomen; twelve more leeches were applied, pulse being at that time 112, and of good strength. She began to sink early in the morning of January 4th, and died at half past 10 or 11 o'clock.

Post-mortem three days after death, by Dr. ELLIS. There was greenish discoloration of the *skin* in the hypogastric region. Some vascularity of the lower edge of the *large omentum* and of the loops of the *small intestine* lying just above the pelvis, but no general peritonitis. A little brownish fluid was found in the cavity of the pelvis. The *cellular tissue* in the pubic region, in the anterior half of the pelvis, was of a brownish color, quite offensive, moist and very soft, so that it was readily torn. The *urethra* was quite large, admitting the forefinger with ease. In the portion next the bladder, and to the right of the arch of the pubis, was a sloughy opening of an inch in length, extending into the bladder; it had the appearance of being formed by the sloughing of the part, the tissues in the neighborhood being of a blackish color and very soft. The mucous membrane of the urethra was of a dark red color, as was also that of many parts of the *bladder*. The *ureters* and *pelves of the kidneys* were much dilated, and contained a dirty brownish fluid. The substance of the *kidneys*

was softer than usual, and in many parts yellowish, as from the deposit of pus.

The principal objection to the operation by dilatation, seemed to be the pain and violent contraction of the sphincter, but as the use of anæsthetic agents obviates this difficulty, there seemed to be no good reason why it should not be adopted. Dr. C. thought that the result of this operation should weigh but little, if at all, against this mode of operating; his reasons being that from the position of the lesion, it was probably caused by the pressure of the blades of the forceps and the rough surface of the stone acting upon a diseased bladder, a circumstance which could not be wholly prevented. During the passage of the stone through the urethra, little if any pressure could have been made upon the part showing marks of injury, as the extraction was made in a direction which would cause pressure rather on the lower edge of the pubic bone, whereas this lesion corresponds principally to the upper and right side of the pubic bone, just where we should look for injury from pressure caused by the stone and the lithotomy forceps, while the handles of the latter were held to the left of the median line.

The misfortune in this case was, that it was necessary to employ two methods; had the stone been a little smaller, it was Dr. C.'s opinion that it could have been extracted without serious injury, but the necessity of reducing its size and afterwards extracting, caused a double risk; had the stone been as easily broken as is usual in this class of stones, it could have been crushed and removed in fragments without much risk. But, as will be seen on examining the specimen, it has a peculiar cellular, instead of a crystalline formation, somewhat like scoria in its appearance, and though friable in detail, is very firm as a whole.

Dr. Cabot, in conclusion, alluded to several cases of stone in which the calculus had passed spontaneously. Bartholin mentions a case where a calculus of more than two inches in diameter was expelled spontaneously by the urethra. Borelli speaks of one expelled in the same manner, as large as the finger. Middleton says that, in a fit of coughing, a woman expelled one that weighed four ounces. Heister mentions cases where one as large as a walnut, and another as large as a hen's egg, were spontaneously expelled. F. Callot mentions one where a calculus as large as a goose's egg was spontaneously expelled. Molyneux says he has seen one which weighed 2½ ounces, which passed in the same way. Yelloly mentions one which weighed over three ounces. Planque mentions cases of even larger stones, expelled in the same manner. Kerkringins, Morand, Grunewald mention other cases as remarkable. M. Segalas had one of at least an inch in its smallest diameter. M. Simon mentions one of 2½ inches long by one in diameter. Mr. Harris saw a woman who passed one 2½ inches long by one in diameter, weighing 651 grains. And Velpeau, from whom these cases are taken, says, that "although some of these calculi may have come from the uterus and vagina, it is nevertheless incontestable that many of them passed by the urethra, and that in certain cases this enormous dilatation was not followed by incontinence of urine." Dr. J. B. S. Jackson informs me that there is a calculus as large as a medium hen's egg, which was

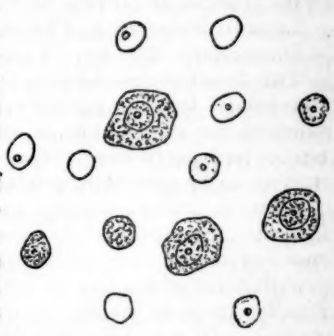
removed by the forceps from a woman's bladder, in the Museum of the Hospital at Halle. There is another in the Hunterian Museum, measuring 1½, 1⅛, and 1 inches; also one measuring 2½, 2 and 1½ inches, the former of which was removed by dilatation, the latter passed spontaneously.

JAN. 12th.—*Recurrent Tumor of the Orbit.*—Dr. BETHUNE showed the specimen, which was removed by him about the 2d of January. The history of the case may be found in the second volume of the Society's Records, page 326. Since the last operation, which is there recorded, the tumor again returned, being situated between the lower lid and lower orbital plate, causing considerable displacement of the eye, this organ being pushed both upward and inward. The patient was discharged well in a few days after the operation, the eye having returned to its place.

The following account of the microscopical appearance, together with the drawing, were furnished by Dr. SHAW.

"The tumor of the orbit presented similar microscopic appearances to those previously removed from the same situation.

"As before, it was composed principally of free globular or oval bodies, which are undoubtedly nuclei, each containing a distinct nucleolus, many of them granular, these being imbedded in a fibrous basis. Only few cells were seen. The latter contained the same nuclei, and were of irregular form and size.



"There was nothing distinctive of cancer or fibro-plastic disease. The nuclei, as before, resembled very much those of glandular structures, like the tonsils, but no lobulated tissue existed.

"I think this is a peculiar microscopic structure, as yet little known, which perhaps may be called cancer, or some other disease, at a future day."

JAN. 12th.—*Hæmorrhoids cured by the removal of a Foreign Body from the Rectum.* Case reported by Dr. SALTER.

Dr. S. was requested to visit J. N., Dec. 27th, 1856, who was suffering much from piles and difficulty of evacuating his bowels. He had been somewhat afflicted in this way for several months, and had been treated accordingly, but this day he was unable to walk about or evacuate his bowels. This was the first time Dr. S. had been consulted in the case. On examination, one tumor was found, about as large as a common-sized walnut, just outside the sphincter, which was not at all constricted, and of a light red color, but sensitive to the touch. On searching for internal tumors, Dr. S. discovered what appeared to be the point or end of a small stick, just within the anus. On attempting to remove it by the forceps, he found that the tumor was forced down at the same time, and the patient complained most bitterly of pain. Dr. S. inferred that a portion of this substance was imbedded in the tumor, and consequently pushed the substance upward into the rectum, and then seizing the tumor and drawing it to one side, pressing the forceps against the opposite side, withdrew the substance, which proved to be the rib-bone of some fowl. In the

course of a week the tumor disappeared, and all complaint of piles was at an end. The man had no recollection of ever having swallowed the bone, and had no idea how long it had been in that position, although he had suffered much from pain in these parts for several months. The accompanying cut gives the size and shape of the offending body.

JAN. 26th.—*Absence of the Omo-Hyoid Muscle.* Dr. HODGES mentioned having observed this anatomical anomaly, one which though well known, was of sufficient rarity and importance to make it worthy of record. It occurred in a female subject remarkable for muscular development. The muscle of one side only was wanting, the other being as usual.

Bibliographical Notices.

Contributions to the Transactions of the Pathological Society of London. By GEORGE D. GIBBS, M.D., M.A., F.G.S., Physician to the West London Dispensary, Physician Accoucheur to the St. Pancras Royal Dispensary, &c. &c. London: 1856. Pp. 15. With a Plate.

THIS brochure contains the details of a case of lobar pneumonia of the *whole* left lung, with disseminated carnification and emphysema of the right lung, in an infant of eight months, and who had never had pertussis; "carnification being believed by some recent writers to be almost exclusively the result of whooping cough."

There is a short account of a calculus taken from the bladder of a field mouse, supposed to be an unique specimen, and the details of a case of congenital malformation with certain singular anatomical peculiarities which cannot easily be made intelligible without the plate. Finally, there is the description of an ovarian tumor, of seven years' growth, and weighing 106 pounds, which was removed, *post-mortem*, from an unmarried woman, aged 31. The latter case embraces certain points of particular interest with reference to diagnosis; 1st, the unevenness or lobulated condition of the surface of the tumor, and, 2d, the elongation or stretching of the uterine cavity, this measuring 7½ inches, and the organ being otherwise round. These conditions would ordinarily be considered as indicative of the existence of fibrous disease of the uterus, and though the rule holds good in a great proportion of the cases, this and similar facts deserve to be constantly borne in mind.

Another interesting circumstance in connection with this case, was the existence of large vessels ramifying over the cyst. There are quite a number of cases reported in which this anatomical condition has been the cause of a fatal result after tapping, an operation which is usually considered so simple. G. H. L.

The Unity of Medicine; An Introductory Lecture by ALFRED STILLE, M.D., Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College.

THE above is the title of one of the introductories. At this season of the year these addresses are drugs in the market—some of them

bad, some of them very bad. A few of them are good enough to bear reading. They are generally well enough for the purpose for which they are written, but they do not contain enough that is important to make it desirable that the custom of publishing them should be perpetuated. We know that many members of the medical classes, who are poor in purse, would feel grateful to the professor who should respectfully decline "to grant a copy of his valuable remarks for the press." After the annual course of lectures has been completed, even the committees, of publication forget the introductories, and they go to the rubbish box with the newspapers of the day.

These remarks we should not make in a notice of *any* address which might be sent to us, because we would not wound the feelings of any one intentionally. We make them in this connection because Professor Stillé's Address is our text, and, upon the basis of *lucus a non lucendo*, we may be permitted to shoot by him without the least intention of making him our mark. It is not every Doctor of Medicine, we regret to say it, whose English will bear criticism, whose metaphors allow of translation, whose logic is up to the mark of Whately and Neill.

Dr. Stillé's Introductory is an endeavor to illustrate the unity of medicine, by an historical sketch of its branches, which embrace the normal and abnormal conditions of the structure and functions of man. His closing remarks are worth quoting, containing, as they do, the information which almost every student of medicine has to find out by experience. The advice coupled with it may be useful to the students of an older growth, who are so apt to neglect all parts of the science of medicine, except the one to which they are more particularly attached.

"It is not uncommon for students to indulge a preference for some one department above others, and to cultivate it at the expense of the rest—or perhaps, out of a feeling that particular branches are unnecessary for success, to yield them a partial and desultory attention. It may be that the established rules for graduation permit, if they do not actually encourage, this reckless contempt of interest and duty. But the student should exercise no such choice, and use no such license, as an imperfect and antiquated law allows him; he should feel it to be his duty to study with diligence *all* of the branches which are taught in the school that he attends. When he has faithfully done so, and only then, he will be competent to devote to some one among them the especial attention which his taste or his interests may dictate. But, in truth, accident more frequently than choice determines the special direction of the physician's talents. It would be easy to cite examples which prove how much stronger in this respect are circumstances than one's own will. In one, occurring in this very city, a decided predilection for surgery has not availed to prevent the embryo surgeon from becoming an eminent and exclusive obstetrician. The distinction and emolument gained by Velpeau as an obstetrical writer and practitioner, did not hinder his entire withdrawal from his original career and his entrance upon one in which he has become the most eminent surgeon of France, if not of the world. Thus in nearly every physician's history it will be found that his predilections have been forced to yield to the necessities of his position, to circumstances which he could not foresee, and for which he could provide only by making himself, while a student, a thorough medical scholar. A due sense, therefore, even of your own interests, a regard for the solid, if sordid, returns for the exercise of your skill, ought to persuade you that, as students, you should neglect no department of medical knowledge, but explore every one to the full extent that your opportunities may allow.

"I take for granted, gentlemen, that your leading object in professional life is

to become distinguished, to rise, that is, above the common level of your profession, and most of all above its lower ranks. I know that men are to be found (I hope not here) who are warmed by none of that noble ambition which is the very moving and vital principle of great minds, many who are content at the end of life to return to Him who gave it their talent unimpaired, but also unimproved; that there are physicians whose whole 'stock in trade' (the phrase seems an appropriate one) is a collection of prescriptions in which the changes are rung on combinations of active drugs, and whose whole library consists of that very excellent, but not quite sufficient book, the *United States Dispensatory*. But, gentlemen, I take for granted that you have not come hither with any such false or degrading notions; that you have not incurred the inconvenience and pain of a separation from those you love best, without having formed a more or less distinct idea that the schools of Philadelphia can furnish you with a professional education it was impossible for you to obtain at home. You must know already that the great toil of your life is before you, and that with your life only will it terminate. You should feel that the boundaries of knowledge are like the natural horizon, forever widening as you rise, and that although you should ascend above the ordinary level perpetually during a whole lifetime, scale every height, overcome every barrier, and even mount on wings as eagles into the highest empyrean that the mind of man has ever reached, you would still behold on every side the less distant, but still impassable limit, beyond which human genius cannot penetrate during the brief period of its earthly power.

"But because the finite and the transient cannot grasp the infinite and eternal, there is no reason why we should mope in some dark corner of the world, like bats that shun the light of day, or that we should sneer at those who, like the ambitious Icarus, perish in attempting too lofty a flight. We should remember our divine origin, that we are 'a little lower than the angels,' and that the only possible assimilation we can obtain to our Creator is by our improving to their utmost all of the faculties with which he has endowed us. By so doing, *we* may deserve the epithet 'godlike,' a title which is often impiously conferred on the scourges, rather than the benefactors, of the human race." C. E. B.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 12, 1857.

A FREE HOSPITAL.

We see by the papers that the City Government has appointed a special committee on that part of the Mayor's Annual Address relating to the establishment of a free hospital. This is a subject of great importance when considered in a charitable point of view, and we earnestly hope that the project will not be dropped, and will meet with better success than did a similar effort in 1849. From the commencement of our medical experience, cases have constantly fallen under our observation showing conclusively the need of greater hospital accommodations for that large class of persons who are able to take care of themselves while in health, but who have not provided the means with which to maintain themselves in sickness. There are many persons included in this class who cannot be accused of improvidence, but who are placed there by circumstances beyond their own control. There also many mechanics, laborers, and male and female domestics who are strangers in the city, and who have no sure place of retreat when overtaken by sickness. To such, this institution would prove a real blessing, and they would gladly avail themselves of it, instead of the alternative of suffering from want and neglect in their

own poor dwellings, or of being sent with paupers and drunkards to the House of Industry on Deer Island.

Some weeks since, we had the pleasure of perusing a memorial to the Board of Mayor and Aldermen on this subject, headed by Robert C. Winthrop as President of the Boston Provident Association, and signed by members of various public charitable societies. It was accompanied by a document setting forth the necessity for such an institution and recommending its establishment, signed by Drs. George Hayward, John Homans, John Reynolds, Solomon D. Townsend, James Jackson, John Ware, Nathaniel B. Shurtleff, and ninety-one other members of the profession. We were informed that this document was signed by every one to whom it was presented, with one exception; and it is a matter of regret that time did not allow of its presentation to every physician in the city. The memorial contained many facts and a large amount of testimony on the part of those who are most conversant with such matters, also hospital statistics of other large cities in Europe and this country. We hope that the committee who have the matter in charge, will think it best to embody this memorial in their report, in addition to their own facts and arguments bearing on the question. The present is a favorable time to carry out a plan which commends itself to the best feelings of every one, and which is received with an unanimity rarely attending matters of public improvement.

Why could not the city secure by hire, or purchase, the beautiful estate on Springfield street, belonging to the Lying-in Hospital, and which we learn is not now in use. It would be an admirable situation, placed at the other extreme of the city from the Massachusetts General Hospital, and would, we conceive, at the same time benefit the latter Institution by aiding in restoring it to the uses originally intended by its founders. Boston, with all her charities, has ever been in the back ground in this matter; and we doubt not, when the facts become known, our citizens will be surprised to know what scanty provision is now made for her sick and industrious poor.

The cost of such an Institution will be the stumbling-block when our city fathers sit down to investigate the subject; but when they consider the other side of the account—the comfort bestowed, the families relieved of that burden and discouragement to a poor man's household—a sick inmate—the consequent release from care, and ability to labor for his own subsistence—we are convinced they will decide that the proposed measure is founded on a wise economy.

The present effort has our hearty sympathy and co-operation, and we give a "God speed" to all engaged in its accomplishment.

MASSACHUSETTS MEDICAL SOCIETY.

A STATED meeting of the Councillors of the Massachusetts Medical Society was held at their rooms, 12 Temple Place, on Wednesday, Feb. 4th, the President, Dr. Huntington of Lowell, in the chair.

Drs. S. Durkee and P. M. Crane were appointed a Committee on the Treasurer's accounts; and Drs. N. B. Shurtleff and E. A. Clarke, on the Library;—to report at the next meeting.

A matter in question between the Treasurer and the Bristol North District Society was referred, with full powers, to the Treasurer and Finance Committee.

Several members were placed, in due course, on the retired list.

The Recording Secretary was authorized to issue certificates to delegates to the meeting of the American Medical Association to be held in Nashville, Tenn., in May next.

A proposition was offered to amend the By-laws so that the Society, and not the Councillors, hereafter appoint the place for the annual meeting—it having been stated that, while the Boston members were indifferent to the subject, the country members preferred to meet in Boston. After some desultory discussion the proposition was laid on the table. It was suggested, however, that the District Societies would do well to signify (by instructing their own Councillors or otherwise) their wishes in the matter, that the Councillors may act more understandingly when the vote on the next place of meeting comes to be taken in June next.

On motion of Dr. John Ware it was

Resolved, That a Committee of five be appointed to consider the expediency of the Fellows of the Massachusetts Medical Society taking measures for the institution of a Medical Relief Society among them, and, if they think expedient, report some plan for such a society.

The following gentlemen were appointed on the Committee: Dr. John Ware, Dr. Horatio Adams, Dr. Henry I. Bowditch, Dr. Edward Jarvis and Dr. John B. Alley.

RELIEF FOR INDIGENT OR DISABLED PHYSICIANS.

Under this head, we announced in the number of this Journal issued December 11th, 1856, that steps had been taken by an association of physicians in this city, at one of their meetings, to ascertain by correspondence with societies (formed with the design of affording this sort of relief) and otherwise, the best methods of procedure in organizing a similar one here. A Committee was appointed, and they have devoted considerable time, made some pecuniary outlay and already received reliable information upon the subject. It strikes us as somewhat supererogatory, to say the least, for the Massachusetts Medical Society to act in the matter in the way they have—as reported in the Journal of to-day. To the originators of the project peculiarly belongs the business of perfecting it, unless they choose to resign that right. By allowing the Committee to arrange and report their plan and to carry it out, if able, the "Fellows" of the Society would be afforded a proper and effectual way of supporting "a Medical Relief Society among them." We incline to the opinion that the highly respected offerer of the motion was unaware of the course proposed and already undertaken; although one of the gentlemen upon the Society's Committee is also upon that appointed by the original movers of the plan.

Entertainment by the Medical Faculty of Harvard University.—The second social entertainment by the Medical Faculty of Harvard University came off on Saturday evening, of last week, at the Tremont House; and, as was the case last season, the occasion was characterized by the interchange of kindly feelings, cordial greetings, and by the canvassing of interesting topics, followed by a hearty and animated discussion of the excellent supper provided. We are glad to repeat our increasing conviction of the very pleasant influence these

gatherings have upon the medical fraternity. There was a large attendance of the medical class and of the physicians of Boston and vicinity.

Medical Department of Harvard University.—The annual catalogue of students attending medical lectures shows this school to be in a flourishing condition. The total number of students is 118, including gentlemen from all parts of the world. We notice the names of fifteen residing in different parts of the British Possessions on this continent. There are also students from Edinburgh, Paris, Switzerland, Russia and Surinam. The number from other parts of the United States than Massachusetts is 38.

The Hathaway Malpractice Suit.—There are certain omissions and slight errors in the report of the evidence of Dr. Geo. Hayward, Sen., as given at the above *quasi* trial, to which we would direct attention, since a wrong impression may be made if they are permitted to pass unnoticed, although to professional readers they would be sufficiently evident, and, of course, referred to the right source.

Dr. Hayward is made to say, page 21st of last week's Journal, that "permanent bony union does not generally take place sooner than a year"; here he referred particularly to the *thigh*, which does not appear by the report. A little further on, "and medulla is absorbed" conveys no meaning pertinent to the case. The surgeon spoke of *the obliteration of the medullary canal* of the shaft of the bone.

Health of the City.—There is a slight increase in the total number of deaths over that of last week, there being 89 the present week to 83 of the last, and a decided advance over the corresponding week of last year, when the deaths in the city were 70. Scarlet fever numbers 30 victims, being a rise of 7 in the weekly mortality as contrasted with the last report. There was but *one* death from this cause in the corresponding week of 1856. Of those recorded at this time, twenty-five were under 5 years of age and five under 20 years; two died at 8 years; one each at 9 and 10 years; one male of 20 years. Consumption numbers 15 deaths, against 12 of last year. There is an increase of 5 in the deaths from inflammation of the lungs between the present and past weeks; with a very close correspondence between the past and present years in this respect, there having been 10 deaths from pneumonia in 1856.

Communications Received.—Pyramidal Cataract.—Operations by Division and Extraction.—Obstetric Cases.—Peritonitis from Perforating Ulcer.

Books and Pamphlets received.—Twentieth Annual Report of the officers of the Vermont Asylum for the Insane. August, 1856.—A Medico-Legal Examination of the case of Charles B. Huntington.—Annual Report of the Commissioners and Superintendent of the Indiana Hospital for the Insane, for the year 1856.—Contributions to Practical Surgery. By Daniel Ayres, M D., LL.D.—An Address to the Graduating Class of Dartmouth Medical College. By W. H. H. Mason, M.D. (From the author.)—Tully's Materia Medica. Vol. I., No. 22.—Annual Address to the officers and students of the New York Ophthalmic Hospital.

MARRIED,—At Huntington, Mass., Nov. 27th, Dr. John H. Gilbert to Miss Jane Copeland, daughter of Melvin Copeland, Esq., all of Huntington.—At New York, 21st ult., Thomas W. Meekins, M.D., of Northampton, Mass., to Harriet R., daughter of Rev. Dr. B. M. Hill.

Deaths in Boston for the week ending Saturday noon, February 7th, 89. Males, 41—Females, 48. Apoplexy, 1—inflammation of the bowels, 1—disease of the brain, 1—cancer, 1—consumption, 15—convulsions, 2—croup, 1—dropsy in the head, 1—drowned, 2—debility, 1—infantile diseases, 2—puerperal, 1—typhoid fever, 1—scarlet fever, 30—disease of the heart, 4—congestion of the lungs, 1—inflammation of the lungs, 8—gangrene of the lungs, 1—old age, 1—pleurisy, 2—disease of the spine, 2—scrofula, 2—rheumatism, 1—teething, 1—thrush, 1—tumor of the abdomen, 1—unknown, 3—worms, 1.

Under 5 years, 44—between 5 and 20 years, 6—between 20 and 40 years, 25—between 40 and 60 years, 8—above 60 years, 6. Born in the United States, 70—Ireland, 13—other places, 6.

A New Anæsthetic Agent.—On Saturday, Dec. 13th, a new anæsthetic agent, named "amylene," was administered by Dr. Snow in some operations performed by Mr. Fergusson and Mr. Bowman in King's College Hospital. The operations consisted in the removal of diseased glands from the groin in one case, an operation for fungus of the testicle, and two cases of tenotomy, in one of which forcible extension of the partially anchylosed knee-joint was made. The pain was entirely prevented in each of the cases, although neither complete stupor nor relaxation of the muscles was produced. The patients seemed in a state of semi-consciousness during the greater part of the time; they recovered very promptly from the effects of the vapor, and there was no sickness in either of the cases, nor yet, as we were informed, in nine previous cases where Dr. Snow had administered amylene in the hospital, prior to the extraction of teeth by Mr. S. Cartwright. The amylene was prepared for Dr. Snow by Mr. Bullock, and was applied with his usual chloroform inhaler.

Mr. Fergusson, in his remarks after the operations, gave the following particulars, with which he said Dr. Snow had furnished him, respecting amylene:—Amylene is made by distilling fusel oil with chloride of zinc. Its composition is C_{10} H_{10}. It is a very light and volatile liquid, being only two-thirds as heavy as water, and boiling at 102 deg. Fahr. The vapor is much less pungent than that of chloroform, although the patient breathes it in much larger quantity. It was first discovered by Cahours, a French chemist, about fifteen years ago.—*London Lancet.*

Dentistry in England.—Efforts are now making in London for the establishment of a Dental College or Institute. The scientific dentists, as well as physicians and surgeons there, are in favor of the plan, and not a few of them are looking to this country for guidance in the matter. A member of the Royal College of Surgeons, in a letter published in the *London Lancet*, says, that when on a visit lately to the United States, his conviction was that dentistry, as an art, was much better understood and practised here than in that country, and recommends the Baltimore College of Dental Surgery as a model for the new English institution.

Insanity in Indiana.—It appears by the last Annual Report of the State Hospital for the Insane in Indiana, that in October, 1855, there were 195 inmates; admitted during the year, 171; under treatment during the year, 366; remaining in October, 1856, 235. 109 were discharged recovered; 17 died; 5 improved.

Medical Miscellany.—The number of students attending lectures at the medical school at Nashville, Tenn., is stated to be 415—and the candidates for graduation as many as 150.—The *Southern Journal of Medical and Physical Sciences*, the publication of which has been suspended for a few months, is to be issued hereafter at Knoxville, Tenn., under the editorial charge of Dr. Richard O. Cuney.—Dr. J. L. Vatier, postmaster at Cincinnati, Ohio, has had an elegant service of silver presented to him by the clerks and attachés of his office.—Dr. Arnott, of London, thinks that the mortality following surgical operations has greatly increased since the introduction of anæsthetics. This opinion needs confirmation by statistical research, which will probably be made in London.